**That which is claimed is:**

1. A fluidizable, attrition resistant sorbent for removing at least one reduced sulfur species from a feed stream comprising:

substantially spherical particles, said particles comprising at least about 75 wt% of an active zinc component consisting essentially of a zinc oxide phase and a zinc aluminate phase, each of said phases having a crystallite size of less than about 500 Angstroms as determined by x-ray diffraction line broadening analysis,

said active zinc component having a total zinc oxide content, calculated based on the combined zinc oxide of said zinc oxide phase and said zinc aluminate phase, of from about 50 wt%, to about 80 wt%, based on the weight of said active zinc component.

2. The fluidizable, attrition resistant sorbent of Claim 1 wherein said particles have a size in the range of from 35 to 175 micrometers.

3. The fluidizable, attrition resistant sorbent of Claim 2 wherein said sorbent has an Attrition Index of less than 2, Attrition Index being defined as:

Attrition Index = (Attrition at 5 hours minus Attrition at 1 hour)/4

and wherein "Attrition" is determined in accordance with ASTM-D5757-95, in each instance.

4. The fluidizable, attrition resistant sorbent of Claim 3 wherein said active zinc oxide component has a total zinc oxide content of at least about 58 wt%.

5. The fluidizable, attrition resistant sorbent of Claim 4 wherein said sorbent is substantially free from any binder or other chemically inert material.

6. The fluidizable, attrition resistant sorbent of Claim 4 wherein said particles have a size in the range of from 40 $\mu$m to 150 $\mu$m.

7 The fluidizable, attrition resistant sorbent of Claim 6 wherein said particles have a compacted bulk density exceeding 1 $g/cm^3$.

8. The fluidizable, attrition resistant sorbent of Claim 7 wherein said particles have a compacted bulk density exceeding 1.3 $g/cm^3$.

9. The fluidizable, attrition resistant sorbent of Claim 8 wherein said sorbent is substantially free from any binder or other chemically inert material.

10. A fluidizable, attrition resistant sorbent for removing at least one reduced sulfur species from a feed stream comprising:

substantially spherical particles, said particles comprising at least about 75 wt% of an active zinc two phase component consisting essentially of a zinc oxide phase and a zinc aluminate phase, said active zinc component having been prepared by converting a mixture of precipitated zinc oxide and aluminum oxide precursors to said two-phase component,

said active zinc two phase component having a total zinc oxide content, calculated based on the combined zinc oxide of said zinc oxide phase and said zinc aluminate phase, of from about 50 wt%, to about 80 wt%, based on the weight of said active zinc component.

11. The fluidizable, attrition resistant sorbent of Claim 10 wherein said particles have a size in the range of from 35 to 175 micrometers.

12. The fluidizable, attrition resistant sorbent of Claim 11 wherein said sorbent has an Attrition Index of less than 2, Attrition Index being defined as:

Attrition Index = (Attrition at 5 hours minus Attrition at 1 hour)/4

and wherein "Attrition" is determined in accordance with ASTM-D5757-95, in each instance.

13. The fluidizable, attrition resistant sorbent of Claim 12 wherein said active zinc oxide component has a total zinc oxide content of at least about 58 wt%.

14. The fluidizable, attrition resistant sorbent of Claim 13 wherein said sorbent is substantially free from any binder or other chemically inert material.

15. The fluidizable, attrition resistant sorbent of Claim 13 wherein said particles have a size in the range of from 40 $\mu$m to 150 $\mu$m.

16. The fluidizable, attrition resistant sorbent of Claim 15 wherein said particles have a compacted bulk density exceeding 1 g/cm$^3$.

17. The fluidizable, attrition resistant sorbent of Claim 16 wherein said particles have a compacted bulk density exceeding 1.3 g/cm$^3$.

18. The fluidizable, attrition resistant sorbent of Claim 17 wherein said sorbent is substantially free from any binder or other chemically inert material.

19. The fluidizable, attrition resistant sorbent of Claim 11 wherein said particles comprise at least about 90 wt% of said active zinc two phase component.

20. The process for preparing a fluidizable, attrition resistant, active zinc oxide containing sorbent comprising the steps:

forming a slurry having a solids content comprising a zinc oxide precursor and a precipitated aluminum oxide precursor, said zinc oxide precursor and said aluminum oxide precursor being present in an amount, calculated as ZnO, and $Al_2O_3$, respectively, in an amount such that said zinc oxide precursor constitutes between about 50 wt%, and about 80 wt%, of the total solids content of said zinc oxide precursor and said aluminum oxide precursor in said slurry; spray drying the slurry to form spray dried particles; and, converting

said zinc oxide precursor and said aluminum oxide precursor to a two phase component consisting essentially of a zinc oxide phase and a zinc aluminate phase.

21. The process of Claim 20 wherein said spray drying step is conducted under conditions sufficient to provide green spray dried particles having a size range of between 35 $\mu$m and 175 $\mu$m.

22. The process of Claim 20 wherein said zinc oxide constitutes at least about 58 wt% of the total solids content of said zinc oxide precursor and said aluminum oxide precursor in said slurry.

23. The process of Claim 22 wherein said spray drying step is conducted under conditions sufficient to provide green spray dried particles having a size range of between 35 $\mu$m and 175 $\mu$m.

24. The process of Claim 21 wherein said slurry additionally comprises at least one additional material selected from the group consisting of promoter precursors, binder precursors and refractory oxide precursors, and wherein said additional material is present in amount selected to provide fluidizable, attrition resistant, active zinc oxide containing sorbent particles containing at least about 75 wt% of said two phase component consisting essentially of a zinc oxide phase and a zinc aluminate phase.

25. The process of Claim 24 wherein said additional material is present in amount selected to provide fluidizable, attrition resistant, active zinc oxide containing sorbent particles containing at least about 80 wt% of said two phase component consisting essentially of a zinc oxide phase and a zinc aluminate phase.

26. The process of Claim 25 wherein said additional material is present in amount selected to provide fluidizable, attrition resistant, active zinc oxide containing sorbent

particles containing at least about 90 wt% of said two phase component consisting essentially of a zinc oxide phase and a zinc aluminate phase.

27. The process of Claim 26 wherein said additional material is present in amount selected to provide fluidizable, attrition resistant, active zinc oxide containing sorbent particles containing at least about 95 wt% of said two phase component consisting essentially of a zinc oxide phase and a zinc aluminate phase.

28. A process for removing at least one reduced sulfur species from a hot feed gas comprising:

contacting said feed gas at a temperature in the range of between about 400°F and about 1000°F, with a particulate sorbent comprising substantially spherical particles comprising at least about 75 wt% of an active zinc component consisting essentially of a zinc oxide phase and a zinc aluminate phase, each of said phases having a crystallite size of less than about 500 Angstroms as determined by x-ray diffraction line broadening analysis.

29. The process of Claim 28 wherein said sorbent particles have a size in the range of from 35 to 175 micrometers.

30. The process of Claim 29 wherein said sorbent has an Attrition Index of less than 2, Attrition Index being defined as:

Attrition Index = (Attrition at 5 hours minus Attrition at 1 hour)/4

and wherein "Attrition" is determined in accordance with ASTM-D5757-95, in each instance.

31. The process of Claim 30 wherein said active zinc oxide component has a total zinc oxide content of at least about 58 wt%.

32. The process of Claim 31 wherein said sorbent is substantially free from any binder or other chemically inert material.

33. The process of Claim 31 wherein said particles have a size in the range of from 40 $\mu$m to 150 $\mu$m.

34. The process of Claim 31 wherein said particles have a compacted bulk density exceeding 1 g/cm$^3$.

35. The process of Claim 33 wherein said particles have a compacted bulk density exceeding 1.3 g/cm$^3$.

36. The process of Claim 35 wherein said sorbent is substantially free from any binder or other chemically inert material.

37. The process of Claim 28 further comprising the steps of regenerating sorbent particles recovered from said contacting step by treating said sorbent particles with an oxygen containing gas at a temperature in the range of between about 950°F and about 1350°F, and recycling at least a portion of said treated particles to said contacting step.

38. The process of Claim 37 wherein said contacting step is conducted at a temperature in the range of between about 550°F and about 750°F.

39. The process of Claim 28 further comprising the steps of regenerating sorbent particles recovered from said contacting step by treating said sorbent particles with an oxygen containing gas at a temperature in the range of between about 1000°F and about 1300°F, and recycling at least a portion of said treated particles to said contacting step.

40. The process of Claim 39 wherein said contacting step is conducted at a temperature in the range of between about 550°F and about 750°F.